MRID No. 425006-01

DATA EVALUATION RECORD

1.   **CHEMICAL**: Diuron.
     Shaughnessey No. 035505.

2.   **TEST MATERIAL**: DPX-14740-166; N'-(3,4-dichlorophenyl)-N,N-dimethylurea; CAS No. 330-54-1; Lot No. 2507; Haskell No. 18,921; 96.8% active ingredient; a yellow powder.

3.   **STUDY TYPE**: 72-4. Saltwater Mysid Life-Cycle Toxicity Test. Species Tested: *Mysidopsis bahia*.

4.   **CITATION**: Ward, T.J. and R.L. Boeri. 1992. Life-Cycle Toxicity of DPX-14740-166 (Diuron) to the Mysid, *Mysidopsis bahia*. EnviroSystems Study No. 91135-DU. Du Pont HLO Report No. 203-92. Prepared by EnviroSystems Division, Resource Analysts, Inc., Hampton, NH. Submitted by E.I. du Pont de Nemours and Company, Inc., Newark, DE. EPA MRID No. 425006-01.

5.   **REVIEWED BY**:

     Conchi Rodríguez   Signature: *Conchi Rodríguez*
     Biologist
     Ecological Effects Branch   Date: 4/21/93
     Environmental Fate and Effects Division

6.   **APPROVED BY**:

     Harry Craven   Signature: *Harry T. Craven*
     Supervisor   4/21/93
     Ecological Effects Branch   Date:
     Environmental Fate and Effects Division

7.   **CONCLUSIONS**: This study is scientifically sound and meets the guideline requirements for a mysid life-cycle toxicity test. Based on the results of this study, the most sensitive parameter was length, MATC >0.27 mg a.i./L < 0.56 mg a.i./L (geometric mean MATC = 0.39 mg a.i./l). Reproduction was affected at 1.9 mg a.i./L.

# of young / surviving female

8.   **RECOMMENDATIONS**: N/A.

9.   **BACKGROUND**:

10. **DISCUSSION OF INDIVIDUAL TESTS**: N/A.

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11. MATERIALS AND METHODS:

A. **Test Animals:** Mysids (*Mysidopsis bahia*) were obtained from in-house cultures. The mysids were free from disease and abnormalities at the beginning of the test.

B. **Test System:** An intermittent-flow proportional diluter delivered test solution or control water to individual 20-l glass aquaria (20 x 40 x 25 cm). The maximum test solution volume was 8 l. The mysids were held in cages throughout the exposure period. The cages were 9-cm diameter glass petri dishes with 10-cm high Nitex screen collars. Six cages were placed in each test aquarium. Each aquarium was equipped with a self starting siphon which varied the water depth between 4 and 10 cm and ensured adequate flow of test solution into the mysid cages. The volume of each aquarium was replaced an average of 11.9 times every 24 hours. All parts of the diluter in contact with the test solutions were made of glass or Teflon®.

The test aquaria were randomly positioned in a temperature-controlled water bath set to maintain 25 ±2°C. The system was maintained on a 16-hour light/8-hour dark photoperiod under cool-white fluorescent light with an intensity of 10 $\mu Es^{-1}m^{-2}$ (≈50 footcandles). Fifteen-minute dawn and dusk simulations were used. Beginning on day 6 until the end of the test, aeration was provided to all test vessels.

A 40,000 mg/l primary stock was prepared in dimethylformamide (DMF) and delivered to the diluter where it was mixed with seawater to form a secondary stock. The secondary stock was diluted further to give the desired nominal concentrations.

The dilution water used for acclimation and testing was seawater collected from the Atlantic Ocean at Hampton, NH. The salinity was adjusted to 20 ±1 parts per thousand (ppt) using an undescribed method, stored in 500-gallon polyethylene tanks, and aerated. The water was UV-sterilized and filtered (≤15 μm) prior to use.

C. **Dosage:** Twenty-eight-day, flow-through test. Based on the information supplied by the sponsor, five nominal concentrations (0.28, 0.60, 1.0, 2.0, and 4.0 mg a.i./l), a dilution water control, and a solvent control were used. The solvent concentration in the solvent control and highest test concentration was 0.1

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DATA EVALUATION RECORD

1. **CHEMICAL:** Diuron.
    Shaughnessey No. 035505.

2. **TEST MATERIAL:** DPX-14740-166; N'-(3,4-dichlorophenyl)-N,N-dimethylurea; CAS No. 330-54-1; Lot No. 2507; Haskell No. 18,921; 96.8% active ingredient; a yellow powder.

3. **STUDY TYPE:** 72-4. Saltwater Mysid Life-Cycle Toxicity Test. Species Tested: *Mysidopsis bahia*.

4. **CITATION:** Ward, T.J. and R.L. Boeri. 1992. Life-Cycle Toxicity of DPX-14740-166 (Diuron) to the Mysid, *Mysidopsis bahia*. EnviroSystems Study No. 91135-DU. Du Pont HLO Report No. 203-92. Prepared by EnviroSystems Division, Resource Analysts, Inc., Hampton, NH. Submitted by E.I. du Pont de Nemours and Company, Inc., Newark, DE. EPA MRID No. 425006-01.

5. **REVIEWED BY:**

    Louis M. Rifici, M.S.   **Signature:** *Louis M Rifici*
    Associate Scientist
    KBN Engineering and   **Date:** 4/1/93
    Applied Sciences, Inc.

6. **APPROVED BY:**

    Pim Kosalwat, Ph.D.   **Signature:** *P. Kosalwat*
    Senior Scientist
    KBN Engineering and   **Date:** 4/1/93
    Applied Sciences, Inc.

    Henry T. Craven, M.S.   **Signature:** *Henry T. Craven* 4/29/93
    Supervisor, EEB/EFED
    USEPA   **Date:** *Conchi Rodriguez* 4/21/93

7. **CONCLUSIONS:** This study is scientifically sound and meets the guideline requirements for a mysid life-cycle toxicity test. The MATC of DPX-14740-166 for mysids was >0.27 mg a.i./l and <0.56 mg a.i./l, mean measured concentrations (geometric mean MATC = 0.39 mg a.i./l).

8. **RECOMMENDATIONS:** N/A.

9. **BACKGROUND:**

10. **DISCUSSION OF INDIVIDUAL TESTS:** N/A.

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ml/l, and ranged from 0.007 to 0.05 ml/l in the four lower test concentrations.

D. **Design:** Sixty mysids (<24 hours old) were randomly distributed to each of two replicate test aquaria per concentration. Within each replicate, the mysids were evenly subdivided between the six cages. On day 14, the mysids were rearranged so that male and female pairs were placed in five cages and the remaining unpaired mysids were placed in the sixth cage. Two to three pairs were placed in each cage. The mysids were fed newly-hatched brine shrimp twice per day except during the last day of the test.

Observations of mortality and sublethal responses (loss of equilibrium, erratic swimming, loss of reflex, excitability, discoloration, or change in behavior) were recorded every 24 hours. Every one to three days, offspring produced were counted and removed. Dead mysids were removed from the containers when first observed. The length (mm) and wet (blotted) weight of the surviving adult mysids were determined at the conclusion of the test. The mysids were dried at 60°C for 72 hours for dry weight determinations.

The test chambers and cages were cleaned daily beginning on day 2. The temperature, dissolved oxygen concentration (DO), salinity, and pH were measured daily in each aquarium. The temperature in one aquarium was recorded continuously during the study.

DPX-14740-166 concentrations were measured using high performance liquid chromatography. Samples were taken from the primary and secondary stock solutions and each test vessel on days 0, 7, 14, 21, and 28. The samples were filtered (0.5 μm) before analysis.

E. **Statistics:** The following endpoints were analyzed statistically: the number of adult mysids surviving the exposure period, the number of young per surviving female after 28 days of exposure, the number of young released per reproductive day, the total length of the surviving mysids, and the wet and dry weight of adult mysids at the end of the test.

The data were tested for normality and homoscedasticity using Shapiro-Wilk's and Bartlett's tests, respectively. Analysis of variance (ANOVA) and Dunnett's test were used on normal data and the Kruskal-Wallace test was used on non-normal data.

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Since the dilution water control and solvent control data were not significantly different (t-test), both control data were pooled for each parameter. Dichotomous (mortality) data were transformed (arcsine square root) prior to analysis.

12. **REPORTED RESULTS:** The mean measured concentrations were 0.27, 0.56, 0.96, 1.9, and 3.9 mg a.i./l (Table 2, attached). These values were 93 to 98% of nominal. The measured concentrations during the test were presented in Table A.1, attached). No insoluble material was observed in any test vessel during the test.

No sublethal effects were observed during the test. For all endpoints, the solvent control and dilution water control responses were statistically similar. Mean values for survival, reproduction, length, and weight, and the results of statistical analyses were presented in Table 3 (attached).

During the test, the pH ranged from 7.7 to 8.4 and the salinity was 19-21 ppt. The temperature range was 24.0 to 26.3°C. The lowest DO was 5.4 mg/l. The author reported that these parameters were within acceptable limits throughout the test.

13. **STUDY AUTHOR'S CONCLUSIONS/QUALITY ASSURANCE MEASURES:**
"The most sensitive measure of toxicity determined by statistical analysis of survival, growth, and reproduction data was the number of young per female. Exposure of mysids to DPX-14740-166 resulted in an LOEL of 1.9 mg/l, an NOEL of 0.96 mg/l, and an MATC of 1.4 mg/l. All other measured biological parameters produced LOELs at higher concentrations of DPX-14740-166 than the LOEL for number of young per female (Table 5)."

Good laboratory practice and quality assurance statements were included in the report, indicating that the study was conducted in accordance with USEPA Good Laboratory Practice Standards set forth in 40 CFR Part 160.

14. **REVIEWER'S DISCUSSION AND INTERPRETATION OF STUDY RESULTS:**

A. **Test Procedure:** Since there is no SEP for mysid life cycle tests at this time, ASTM recommended guidelines (1990) were used in the data validation process. The test procedures were generally in accordance with ASTM, except for the following:

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ASTM recommends that the mysids used for reproduction be separated into individual pairs, one pair per cage. All test chambers and compartments must be identical. In this test, two to three pairs were maintained in each cage. As a result, the cages were not identical since the number of mysids in each cage was not the same.

A primary stock (in DMF) was used to make secondary stock in the diluter system. The concentration of solvent was not the same in each test level. The guideline mandates that, if the concentration of solvent in each test level is different, the effect of the solvent concentration gradient on mysid growth, survival, and reproduction be determined in a separate test. It does not appear that a determination of the effect of the solvent concentration was part of this study.

Information regarding the culture conditions was not provided in the report. Mysid adults used as the source of offspring for the test should be cultured under test conditions for at least 14 days prior to test initiation.

The temperature during the test (24-26.3°C) was lower than recommended (27°C).

B. **Statistical Analysis**: The reviewer used computer programs (Toxstat 3.3 or Crunch 3) to analyze the number of adult mysids surviving the exposure period, the total number of young produced per average number of surviving females (Table 3, attached), the number of young produced per female reproductive day (reviewer calculated), the length of surviving mysids, and the wet and dry weights of surviving mysids.

For each parameter analyzed, the responses of the dilution water control and the solvent control were compared using a t-test or ANOVA. Survival and reproduction in the exposure concentrations were compared to that of the solvent control. The results were the same as the authors' (printouts 1-4, attached).

The raw length, wet weight, and dry weight data were analyzed using two-way ANOVA and Bonferroni's test. The responses of the dilution water control and the solvent control were compared using a t-test or ANOVA. Length, wet weight and dry weight were compared to the dilution

water control. Length and weight data for all mysids in the study were provided in the report, but the reviewer only included those mysids involved in the reproduction portion of the study in the statistical analysis.

C.   **Discussion/Results**: Survival and Reproduction: Mysid survival was not affected during the study. The NOEL for survival is 3.9 mg/L. Effects were observed in the reproduction endpoint. The LOEL for the total number of young per mean surviving female and the number of young per female reproductive day is 1.9 mg a.i./L. The NOEL is 0.96 mg a.i./L (geometric mean = 1.4 mg a.i./L).

Length: Length at concentrations ≥0.96 mg a.i./L was significantly lower than the solvent control (printout 5, attached), and when compared to dilution water control length, concentrations ≥0.56 mg a.i./L were significantly reduced. Using the solvent control results, the resultant MATC was >0.56 mg a.i./L and <0.96 mg a.i./L (geometric mean = 0.73 mg a.i./L). However, the concentration of solvent was highest in the solvent control and highest test concentration and it appears that the presence of the solvent negatively affected mysid length in the solvent control. Since the four lower test concentration solutions contained considerable less solvent than that of the solvent control, these treatment levels should be compared to the dilution water control data. Based on the response of the dilution water control mysids, the MATC was >0.27 mg a.i./L and <0.56 mg a.i./L, mean measured concentrations (geometric mean MATC = 0.39 mg a.i./L).

Weight: Average wet weight and dry weight were significantly lower than solvent control at 3.9 mg a.i./L. However, when compared to the dilution water control, wet weight and dry weight were significantly reduced at ≥1.9 mg a.i./L and ≥0.96 mg a.i./L, respectively. The concentration of solvent was highest in the solvent control and highest test concentration and it appears that the presence of the solvent negatively affected mysid weight in the solvent control. Since the four lower test concentration solutions contained considerable less solvent than that of the solvent control, these treatment levels should be compared to the dilution water control data. Based on the response of the dilution water control mysids, the MATC for wet weight was >0.96 mg a.i./L and 1.9 mg a.i./L (geometric mean = 1.4 mg a.i./L). The MATC for

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dry weight was >0.56 mg a.i./L and 0.96 mg a.i./L
(geometric mean = 0.73 mg a.i./L).

This study is scientifically sound and meets the
guideline requirements for a mysid life-cycle toxicity
test. It should be mentioned that the number of mysid
pairs in each cage was the same at the initiation of
the reproduction portion of the study and the solvent
has negative effects on length and weight. Based on the
results of this study, the most sensitive parameter was
length, MATC >0.27 mg a.i./L < 0.56 mg a.i./L.
Reproduction was affected at 1.9 mg a.i./L.

D.   **Adequacy of the Study**:

   (1) Classification: Core.

   (2) Rationale: N/A.

   (3) Repairability: N/A.

15. COMPLETION OF ONE-LINER FOR STUDY: Yes, 03-16-93.

Table A.1 Analytical data from the toxicity test with mysids, *Mysidopsis bahia*, and DPX-14740-166.

Sample Description	Nominal Concentration (mg/L)	Rep.	Measured Concentration (mg/L)				
			Day 0	Day 7	Day 14	Day 21	Day 28
Test media	0.00 (control)	1	ND	ND	ND	ND	ND
		2	ND	ND	ND	ND	ND
	0.00 (solvent control)	1	ND	ND	ND	ND	ND
		2	ND	ND	ND	ND	ND
	0.28	1	0.26	0.27	0.27	0.27	0.24
		2	0.28	0.27	0.29	0.28	0.25
	0.60	1	0.55	0.58	0.58	0.58	0.51
		2	0.56	0.58	0.57	0.58	0.52
	1.00	1	0.95	1.0	0.99	0.98	0.88
		2	0.96	1.0	1.0	0.99	0.90
	2.00	1	1.9	2.0	2.0	1.9	1.7
		2	1.9	2.0	2.0	2.0	1.8
	4.00	1	3.8	4.0	4.0	3.9	3.6
		2	4.0	4.1	3.9	3.8	3.6
Diluter stock soln.	4.00	1	3.9	4.0	3.8	3.8	3.6
Primary stock soln.	40,000	1	35,000	34,000	39,000	44,000	40,000
Lab control sample	0.60	1	0.58	0.59	0.64	0.63	0.66
Matrix spike sample	0.60	1	0.59	0.60	0.62	0.63	0.64
		2	0.60	0.60	0.63	0.62	0.66
Blank	0.00	1	ND	ND	ND	ND	ND

Note: ND = none detected at or above the analytical detection limit of 0.075 mg/L DPX-14740-166 active ingredient.

EnviroSystems Study Number 91135-DU

Table 3.   Summary of mean survival, reproduction, length, and weight data from the toxicity test with mysids, *Mysidopsis bahia*, and DPX-14740-166.

Mean Measured Concentration (mg/L)	rep.	Percent Survival at Day 28	Production of Young by Day 28		Total Length (mm)	Weight (mg)	
			A	B		Wet	Dry
ND (control)	1	90.0	9.2	0.6	9.6	5.6	1.0
	2	90.0	9.9	0.7	9.7	5.6	1.0
	Mean	90.0	9.6	0.7	9.7	5.6	1.0
ND (solvent control)	1	93.9	10.6	0.8	9.4	5.0	0.9
	2	90.0	7.4	0.5	9.3	4.6	0.8
	Mean	91.7	9.0	0.6	9.4	4.8	0.8
0.27	1	86.7	10.3	0.7	9.4	5.4	0.9
	2	86.7	8.1	0.6	9.5	5.0	0.9
	Mean	86.7	9.2	0.7	9.5	5.2	0.9
0.56	1	96.7	6.8	0.5	9.2	5.3	0.9
	2	83.3	8.1	0.6	9.2	5.4	0.9
	Mean	90.0	7.4	0.5	9.2	5.4	0.9
0.96	1	86.7	9.2	0.7	9.1	5.3	0.9
	2	70.0	2.8	0.2	8.9	5.0	0.8
	Mean	78.3	6.0	0.4	9.0	5.2	0.8
1.9	1	83.3	4.9	0.4	8.6	4.4	0.7
	2	76.7	3.2	0.2	8.9	4.8	0.8
	Mean	80.0	4.0 *	0.3	8.8	4.6	0.7
3.9	1	83.3	0.0	0.0	7.6	3.2	0.5
	2	46.7	0.0	0.0	7.6	3.4	0.5
	Mean	65.0	0.0 **	0.0 **	7.6	3.3 *	0.5

Notes: 1. ND = none detected at the analytical detection limit of 0.075 mg/L DPX-14740-166 active ingredient.

2. Mean values marked with a "*" are significantly different from the pooled control and solvent control at the 95% confidence level.

3. Mean values marked with a "**" are assumed to be different from the control and were not included in statistical analyses.

4. Young production values in column A are calculated as the total number of young produced divided by the average number of surviving females. Young production values in column B are calculated as the number of young released per reproductive day.

425006-01, Diuron, mysid survival, day 28
File: a:42500601.dt1   Transform: ARC SINE(SQUARE ROOT(Y))

Shapiro Wilks test for normality
Data PASS normality test at P=0.01 level. Continue analysis.

Hartley test for homogeneity of variance
Bartletts test for homogeneity of variance
These two tests can not be performed because at least one group has
zero variance.
Data FAIL to meet homogeneity of variance assumption.
Additional transformations are useless.

                              ANOVA TABLE

SOURCE   DF   SS   MS   F

Between   6   0.175   0.029   1.513
Within (Error)   7   0.135   0.019

Total   13   0.309

  Critical F value =   3.87 (0.05,6,7)
  Since F < Critical F FAIL TO REJECT Ho:All groups equal

      DUNNETTS TEST   -   TABLE 1 OF 2   Ho:Control<Treatment
----
                         TRANSFORMED   MEAN CALCULATED IN
GROUP   IDENTIFICATION   MEAN   ORIGINAL UNITS   T STAT SIG
----- --------------   -----------   ----------------- ------ ---
  1   solvent control   1.285   0.919
  2   dilution contrl   1.249   0.900   0.260
  3   0.27 mg/l   1.197   0.867   0.632
  4   0.56   1.269   0.900   0.117
  5   0.96   1.094   0.784   1.376
  6   1.9   1.108   0.800   1.274
  7   3.9   0.951   0.650   2.408

Dunnett table value = 2.82   (1 Tailed Value, P=0.05, df=7,6)

      DUNNETTS TEST   -   TABLE 2 OF 2   Ho:Control<Treatment
----
                         NUM OF Minimum Sig Diff % of   DIFFERENCE
GROUP   IDENTIFICATION   REPS   (IN ORIG. UNITS) CONTROL FROM CONTROL
----- --------------   ------- ---------------- ------- ------------
  1   solvent control   2
  2   dilution contrl   2   0.313   34.0   0.020
  3   0.27 mg/l   2   0.313   34.0   0.052
  4   0.56   2   0.313   34.0   0.020
  5   0.96   2   0.313   34.0   0.136
  6   1.9   2   0.313   34.0   0.119
  7   3.9   2   0.313   34.0   0.270

          KRUSKAL-WALLIS ANOVA BY RANKS - TABLE 1 OF 2 (p=0.05)

                         TRANSFORMED   MEAN CALCULATED IN   RANK
GROUP   IDENTIFICATION   MEAN   ORIGINAL UNITS   SUM
----- --------------   -----------   ------------------ -----------
  1   solvent control   1.285   0.919   24.000
  2   dilution contrl   1.249   0.900   22.000
  3   0.27 mg/l   1.197   0.867   16.000
  4   0.56   1.269   0.900   19.000
  5   0.96   1.094   0.784   10.000
  6   1.9   1.108   0.800   8.000
  7   3.9   0.951   0.650   6.000

  Calculated H Value =   8.862   Critical H Value Table = 12.590
  Since Calc H < Crit H FAIL TO REJECT Ho:All groups are equal.

425006-01, Diuron, mysid survival, day 28
File: a:42500601.dt1   Transform: ARC SINE(SQUARE ROOT(Y))

DUNNS MULTIPLE COMPARISON - KRUSKAL-WALLIS - TABLE 2 OF 2 (p=0.05)

		TRANSFORMED	ORIGINAL	GROUP 0 0 0 0 0 0 0
GROUP	IDENTIFICATION	MEAN	MEAN	7 5 6 3 2 4 1
-----	--------------	-----------	--------	- - - - - - -
7	3.9	0.951	0.650	\
5	0.96	1.094	0.784	. \
6	1.9	1.108	0.800	. . \
3	0.27 mg/l	1.197	0.867	. . . \
2	dilution contrl	1.249	0.900	. . . . \
4	0.56	1.269	0.900	. . . . . \
1	solvent control	1.285	0.919	. . . . . . \

----
* = significant difference (p=0.05)   . = no significant difference
Table q value (0.05,7) =   3.038   SE =   4.128

425006-01, Diuron, total young/mean # surviving females
File: a:42500601.dt2   Transform: NO TRANSFORMATION

Shapiro Wilks test for normality
Data PASS normality test at P=0.01 level. Continue analysis.

Hartley test for homogeneity of variance
Bartletts test for homogeneity of variance
These two tests can not be performed because at least one group has
zero variance.
Data FAIL to meet homogeneity of variance assumption.
Additional transformations are useless.

WILLIAMS TEST   (Isotonic regression model)   TABLE 1 OF 2

GROUP	IDENTIFICATION	N	ORIGINAL MEAN	TRANSFORMED MEAN	ISOTONIZED MEAN
1	solvent control	2	9.000	9.000	9.275
2	dilution contrl	2	9.550	9.550	9.275
3	0.27 mg/l	2	9.200	9.200	9.200
4	0.56	2	7.450	7.450	7.450
5	0.96	2	6.000	6.000	6.000
6	1.9	2	4.050	4.050	4.050
7	3.9	2	0.000	0.000	0.000

WILLIAMS TEST   (Isotonic regression model)   TABLE 2 OF 2

IDENTIFICATION	ISOTONIZED MEAN	CALC. WILLIAMS	SIG P=.05	TABLE WILLIAMS	DEGREES OF FREEDOM
solvent control	9.275				
dilution contrl	9.275	0.132		1.89	k= 1, v= 7
0.27 mg/l	9.200	0.096		2.00	k= 2, v= 7
0.56	7.450	0.742		2.04	k= 3, v= 7
0.96	6.000	1.436		2.06	k= 4, v= 7
1.9	4.050	2.369	*	2.07	k= 5, v= 7
3.9	0.000	4.308	*	2.08	k= 6, v= 7

s =   2.089
Note: df used for table values are approximate when v > 20.

Same (handwritten)

Analysis of Variance   File: diuron   Date: 03-15-1993

N's, means and standard deviations based on dependent variable: YAD

Reviewer calculated # Young/Adult Female Reproductive day

Factors: T R		N	Mean	S.D.
* *		60	0.8245	0.5036
1 *	= Solvent control	10	0.8560	0.4291
2 *	= dilution watercon	10	1.0310	0.4631
3 *	= 0.27mg/l	10	1.1750	0.6782
4 *	= 0.56 mg/l	10	0.8350	0.2399
5 *	= 0.96 mg/l	10	0.6790	0.4988
6 *	= 1.9 mg/l	10	0.3710	0.2461
* 1		30	0.8987	0.4786
* 2		30	0.7503	0.5249
1 1		5	0.8840	0.4097
1 2		5	0.8280	0.4944
2 1		5	0.9920	0.1911
2 2		5	1.0700	0.6649
3 1		5	1.3000	0.7833
3 2		5	1.0500	0.6182
4 1		5	0.8460	0.1826
4 2		5	0.8240	0.3096
5 1		5	0.9900	0.4825
5 2		5	0.3680	0.2918
6 1		5	0.3800	0.1190
6 2		5	0.3620	0.3492

no repro in 3.9 mg/l

Fmax for testing homogeneity of between subjects variances: 43.36
Number of variances= 12   df per variance=   4.

Analysis of Variance   Dependent variable: YAD

Source	df	SS (H)	MSS	F	P
Between Subjects	59	14.9627			
T (TRT)	5	3.9343	0.7869	3.823	0.0053
R (REP)	1	0.3300	0.3300	1.603	0.2115
TR	5	0.8185	0.1637	0.795	0.5624
Subj w Groups	48	9.8799	0.2058		

Post-hoc tests for factor T (TRT)

Level	Mean	Level	Mean
1	0.856	6	0.371
2	1.031		
3	1.175		
4	0.835		
5	0.679		

Comparison	Bon-ferroni	T-test	Dunnett
1 < 2			
1 < 3			
1 > 4			
1 > 5			
1 > 6		0.0208	
2 < 3			N.A.
2 > 4			N.A.
2 > 5		0.0892	N.A.
2 > 6	0.0316	0.0021	N.A.
3 > 4			N.A.
3 > 5		0.0182	N.A.
3 > 6	0.0039	0.0003	N.A.
4 > 5			N.A.
4 > 6		0.0266	N.A.
5 > 6			N.A.

Same

        For Dunnett's test only the P-values .05 and .01 are possible
        and only for comparisons with the control mean (level 1).

Analysis of Variance   File: diuron2   Date: 03-15-1993
N's, means and standard deviations based on dependent variable: LENGTH   *of Reproductive fans Mysids*

Factors: T R	N	Mean	S.D.
* *	322	9.0727	0.7186
1 * *S.C.*	51	9.3627	0.4476
2 * *dw.c.*	50	9.6380	0.3181
3 * *0.27*	50	9.4520	0.4022
4 * *0.54*	48	9.2312	0.3793
5 * *0.96*	41	9.0293	0.5326
6 * *1.9*	45	8.7400	0.4474
7 * *3.9*	37	7.6432	0.4285
* 1	166	9.0217	0.7414
* 2	156	9.1269	0.6917
1 1	25	9.4000	0.3500
1 2	26	9.3269	0.5296
2 1	24	9.5917	0.3623
2 2	26	9.6808	0.2713
3 1	25	9.4240	0.4549
3 2	25	9.4800	0.3488
4 1	24	9.2750	0.3179
4 2	24	9.1875	0.4347
5 1	20	9.1400	0.5315
5 2	21	8.9238	0.5243
6 1	25	8.6200	0.3731
6 2	20	8.8900	0.4951
7 1	23	7.6478	0.4294
7 2	14	7.6357	0.4431

Fmax for testing homogeneity of between subjects variances: 3.84
Number of variances= 14   df per variance= 21.

Analysis of Variance   Dependent variable: LENGTH

Source	df	SS (H)	MSS	F	P
Between Subjects	321	165.7587			
T (TRT)	6	109.3309	18.2218	102.341	0.0000
R (REP)	1	0.0033	0.0033	0.018	0.8923
TR	6	1.5850	0.2642	1.484	0.1819
Subj w Groups	308	54.8396	0.1781		

Post-hoc tests for factor T (TRT)

Level	Mean	Level	Mean
1	9.363	6	8.740
2	9.638	7	7.643
3	9.452		
4	9.231		
5	9.029		

Comparison	Bon-ferroni	T-test	Dunnett
1 < 2	0.0248	0.0012	0.0500
1 < 3			
1 > 4			
1 > 5	0.0044	0.0002	0.0100
1 > 6	0.0000	0.0000	0.0100
1 > 7	0.0000	0.0000	0.0100
2 > 3		0.0282	N.A.
2 > 4	0.0000	0.0000	N.A.
2 > 5	0.0000	0.0000	N.A.
2 > 6	0.0000	0.0000	N.A.
2 > 7	0.0000	0.0000	N.A.
3 > 4		0.0101	N.A.
3 > 5	0.0000	0.0000	N.A.
3 > 6	0.0000	0.0000	N.A.
3 > 7	0.0000	0.0000	N.A.
4 > 5		0.0251	N.A.
4 > 6	0.0000	0.0000	N.A.
4 > 7	0.0000	0.0000	N.A.
5 > 6	0.0349	0.0017	N.A.
5 > 7	0.0000	0.0000	N.A.
6 > 7	0.0000	0.0000	N.A.

sc < Dwc

— 0.96 mg/l

— 0.54 mg/l

noec(sc) = 0.54 mg/l

Analysis of Variance   File: diuron3   Date: 03-15-1993
N's, means and standard deviations based on dependent variable: WETWEIGH

Factors: T R	N	Mean	S.D.
* *	70	4.8929	0.8390
1 * = *Sc.*	10	4.9500	0.3408
2 * = *d wc*	10	5.5700	0.5078
3 * = *0.27*	10	5.2100	0.5971
4 * = *0.56*	10	5.4200	0.6015
5 * = *0.96*	10	5.2100	0.3929
6 * = *1.9*	10	4.5800	0.3393
7 * = *3.9*	10	3.3100	0.3107
* 1	35	4.9029	0.8903
* 2	35	4.8829	0.7972
1 1	5	5.1000	0.1225
1 2	5	4.8000	0.4359
2 1	5	5.4800	0.1643
2 2	5	5.6600	0.7301
3 1	5	5.4000	0.6819
3 2	5	5.0200	0.4970
4 1	5	5.4200	0.7225
4 2	5	5.4200	0.5404
5 1	5	5.3800	0.4147
5 2	5	5.0400	0.3209
6 1	5	4.3400	0.2302
6 2	5	4.8200	0.2490
7 1	5	3.2000	0.2646
7 2	5	3.4200	0.3421

non-spawners removed

Fmax for testing homogeneity of between subjects variances: 35.53
Number of variances= 14   df per variance=   4.

Analysis of Variance   Dependent variable: WETWEIGH

Source	df	SS (H)	MSS	F	P
Between Subjects	69	48.5664			
T (TRT)	6	35.4414	5.9069	28.834	0.0000
R (REP)	1	0.0070	0.0070	0.034	0.8540
TR	6	1.6460	0.2743	1.339	0.2535
Subj w Groups	56	11.4720	0.2049		

Post-hoc tests for factor T (TRT)

Level	Mean	Level	Mean
1	4.950	6	4.580
2	5.570	7	3.310
3	5.210		
4	5.420		
5	5.210		

Comparison	Bon-ferroni
1 < 2	0.0709
1 < 3	
1 < 4	
1 < 5	
1 > 6	
1 > 7	0.0000
2 > 3	
2 > 4	
2 > 5	
2 > 6	0.0000
2 > 7	0.0000
3 < 4	
3 = 5	
3 > 6	0.0616
3 > 7	0.0000
4 > 5	
4 > 6	0.0026
4 > 7	0.0000
5 > 6	0.0616
5 > 7	0.0000
6 > 7	0.0000

```
Analysis of Variance                    File: diuron3        Date: 03-15-1993
N's, means and standard deviations based on dependent variable: DRYWEIGH
      Factors: T R                     N        Mean           S.D.
               * *                     70       0.8121         0.2012
               1 *  SC                 10       0.8300         0.1059
               2 *  dwc                10       1.0250         0.0635
               3 *  0.27               10       0.9300         0.0675
               4 *  0.56               10       0.8900         0.1663
               5 *  0.96               10       0.8500         0.1179
               6 *  1.9                10       0.7000         0.1333
               7 *  3.9                10       0.4600         0.0699
               * 1                     35       0.8200         0.2112
               * 2                     35       0.8043         0.1934
               1 1                      5       0.8600         0.0894
               1 2                      5       0.8000         0.1225
               2 1                      5       1.0200         0.0837
               2 2                      5       1.0300         0.0447
               3 1                      5       0.9200         0.0837
               3 2                      5       0.9400         0.0548
               4 1                      5       0.9200         0.2280
               4 2                      5       0.8600         0.0894
               5 1                      5       0.9000         0.1000
               5 2                      5       0.8000         0.1225
               6 1                      5       0.6600         0.1140
               6 2                      5       0.7400         0.1517
               7 1                      5       0.4600         0.0548
               7 2                      5       0.4600         0.0894
```

non spawners removed

```
Fmax for testing homogeneity of between subjects variances:   26.00
Number of variances= 14   df per variance=   4.
```

```
Analysis of Variance          Dependent variable: DRYWEIGH
Source              df      SS (H)      MSS      F        P
Between Subjects   69      2.7922
  T (TRT)           6      2.0359     0.3393   27.302   0.0000
  R (REP)           1      0.0043     0.0043    0.348   0.5578
  TR                6      0.0559     0.0093    0.750   0.6148
  Subj w Groups    56      0.6960     0.0124
Post-hoc tests for factor T (TRT)
  Level    Mean    Level   Mean
    1      0.830     6     0.700
    2      1.025     7     0.460
    3      0.930
    4      0.890
    5      0.850
                   Bon-
     Comparison   ferroni
       1 < 2      0.0056
       1 < 3
       1 < 4
       1 < 5
       1 > 6
       1 > 7      0.0000
       2 > 3
       2 > 4
       2 > 5      0.0191
       2 > 6      0.0000
       2 > 7      0.0000
       3 > 4
       3 > 5
       3 > 6      0.0006
       3 > 7      0.0000
       4 > 5
       4 > 6      0.0076
       4 > 7      0.0000
       5 > 6      0.0826
       5 > 7      0.0000
       6 > 7      0.0000
```

Data listing   File: diuron   Date: 03-15-1993

Obs.	TRT	REP	YAD
1	1	1	1.00
2	1	1	1.13
3	1	1	0.67
4	1	1	1.33
5	1	1	0.29
6	1	2	0.39
7	1	2	0.58
8	1	2	1.67
9	1	2	0.79
10	1	2	0.71
11	2	1	0.86
12	2	1	0.90
13	2	1	1.32
14	2	1	0.88
15	2	1	1.00
16	2	2	0.55
17	2	2	0.53
18	2	2	0.78
19	2	2	1.42
20	2	2	2.07
21	3	1	1.03
22	3	1	0.69
23	3	1	0.75
24	3	1	2.60
25	3	1	1.43
26	3	2	0.48
27	3	2	1.33
28	3	2	2.00
29	3	2	0.67
30	3	2	0.77
31	4	1	0.81
32	4	1	0.85
33	4	1	0.79
34	4	1	0.64
35	4	1	1.14
36	4	2	1.05
37	4	2	1.06
38	4	2	0.30
39	4	2	0.86
40	4	2	0.85
41	5	1	0.68
42	5	1	1.17
43	5	1	0.46
44	5	1	1.71
45	5	1	0.93
46	5	2	0.05
47	5	2	0.52
48	5	2	0.70
49	5	2	0.07
50	5	2	0.50
51	6	1	0.50
52	6	1	0.31
53	6	1	0.36
54	6	1	0.23
55	6	1	0.50
56	6	2	0.00
57	6	2	0.71
58	6	2	0.42
59	6	2	0.00
60	6	2	0.68

Obs.	TRT	REP	CAGE	LENGTH
1	1	1	1.0	8.9
2	1	1	1.0	10.3
3	1	1	1:0	9.8
4	1	1	1.0	9.7
5	1	1	1.0	9.4
6	1	1	1.0	9.6
7	1	1	2.0	9.7
8	1	1	2.0	8.9
9	1	1	2.0	9.4
10	1	1	2.0	9.2
11	1	1	2.0	9.3
12	1	1	2.0	9.6
13	1	1	3.0	8.6
14	1	1	3.0	9.2
15	1	1	3.0	9.5
16	1	1	3.0	9.7
17	1	1	3.0	9.6
18	1	1	3.0	9.4
19	1	1	4.0	8.9
20	1	1	4.0	9.4 —9.7
21	1	1	4.0	9.2
22	1	1	4.0	9.4
23	1	1	5.0	9.3
24	1	1	5.0	9.6
25	1	1	5.0	9.4
26	1	2	1.0	8.8
27	1	2	1.0	10.0
28	1	2	1.0	8.7
29	1	2	1.0	9.4
30	1	2	1.0	9.2
31	1	2	1.0	9.7
32	1	2	2.0	9.4
33	1	2	2.0	9.6
34	1	2	2.0	9.9
35	1	2	2.0	9.4
36	1	2	2.0	9.6
37	1	2	2.0	9.5
38	1	2	3.0	9.2
39	1	2	3.0	9.4
40	1	2	3.0	10.1
41	1	2	3.0	9.7
42	1	2	3.0	9.2
43	1	2	3.0	8.9
44	1	2	4.0	7.5
45	1	2	4.0	9.2
46	1	2	4.0	8.7
47	1	2	4.0	9.3
48	1	2	5.0	9.4
49	1	2	5.0	9.2
50	1	2	5.0	10.0
51	1	2	5.0	9.5
52	2	1	1.0	9.7
53	2	1	1.0	9.9
54	2	1	1.0	9.5
55	2	1	1.0	9.8
56	2	1	1.0	9.4
57	2	1	1.0	9.8
58	2	1	2.0	9.5
59	2	1	2.0	9.6
60	2	1	2.0	9.4
61	2	1	2.0	9.7
62	2	1	2.0	9.6
63	2	1	2.0	9.6
64	2	1	3.0	9.9
65	2	1	3.0	10.2
66	2	1	3.0	9.6
67	2	1	3.0	9.4
68	2	1	4.0	10.4

69	2	1	4.0	9.6
70	2	1	4.0	9.5
71	2	1	4.0	9.9
72	2	1	5.0	8.7
73	2	1	5.0	8.9
74	2	1	5.0	9.4
75	2	1	5.0	9.2
76	2	2	1.0	9.9
77	2	2	1.0	9.8
78	2	2	1.0	10.2
79	2	2	1.0	9.6
80	2	2	1.0	9.4
81	2	2	1.0	9.5
82	2	2	2.0	9.1
83	2	2	2.0	10.0
84	2	2	2.0	9.8
85	2	2	2.0	9.7
86	2	2	2.0	9.5
87	2	2	2.0	9.4
88	2	2	3.0	10.4
89	2	2	3.0	9.9
90	2	2	3.0	9.6
91	2	2	3.0	9.7
92	2	2	3.0	9.5
93	2	2	3.0	9.6
94	2	2	4.0	9.6
95	2	2	4.0	10.0
96	2	2	4.0	9.7
97	2	2	4.0	9.5
98	2	2	5.0	9.5
99	2	2	5.0	9.6
100	2	2	5.0	9.5
101	2	2	5.0	9.7
102	3	1	1.0	10.4
103	3	1	1.0	10.3
104	3	1	1.0	9.3
105	3	1	1.0	9.5
106	3	1	1.0	9.4
107	3	1	1.0	9.5
108	3	1	2.0	9.2
109	3	1	2.0	9.6
110	3	1	2.0	9.5
111	3	1	2.0	8.9
112	3	1	2.0	9.1
113	3	1	2.0	9.7
114	3	1	3.0	9.4
115	3	1	3.0	9.6
116	3	1	3.0	9.3
117	3	1	3.0	9.6
118	3	1	3.0	9.2
119	3	1	4.0	9.3
120	3	1	4.0	8.3
121	3	1	4.0	10.0
122	3	1	4.0	9.6
123	3	1	5.0	8.5
124	3	1	5.0	9.3
125	3	1	5.0	9.5
126	3	1	5.0	9.6
127	3	2	1.0	9.2
128	3	2	1.0	9.2
129	3	2	1.0	9.8
130	3	2	1.0	9.6
131	3	2	1.0	9.5
132	3	2	1.0	9.9
133	3	2	2.0	9.2
134	3	2	2.0	10.0
135	3	2	2.0	9.2
136	3	2	2.0	9.4
137	3	2	2.0	9.4

138	3	2	2.0	9.6
139	3	2	3.0	9.9
140	3	2	3.0	10.0
141	3	2	3.0	9.7
142	3	2	3.0	9.6
143	3	2	4.0	9.1
144	3	2	4.0	9.5
145	3	2	4.0	9.5
146	3	2	4.0	9.4
147	3	2	4.0	9.4
148	3	2	5.0	8.7
149	3	2	5.0	8.8
150	3	2	5.0	9.4
151	3	2	5.0	10.0
152	4	1	1.0	9.5
153	4	1	1.0	9.3
154	4	1	1.0	9.6
155	4	1	1.0	9.0
156	4	1	1.0	8.8
157	4	1	1.0	9.7
158	4	1	2.0	9.4
159	4	1	2.0	9.1
160	4	1	2.0	9.0
161	4	1	2.0	9.6
162	4	1	2.0	9.5
163	4	1	2.0	9.5
164	4	1	3.0	8.8
165	4	1	3.0	9.2
166	4	1	3.0	9.1
167	4	1	3.0	9.7
168	4	1	4.0	9.4
169	4	1	4.0	8.5
170	4	1	4.0	8.9
171	4	1	4.0	9.4
172	4	1	5.0	9.4
173	4	1	5.0	9.2
174	4	1	5.0	9.6
175	4	1	5.0	9.4
176	4	2	1.0	10.0
177	4	2	1.0	9.4
178	4	2	1.0	9.0
179	4	2	1.0	9.6
180	4	2	1.0	9.5
181	4	2	1.0	9.4
182	4	2	2.0	8.9
183	4	2	2.0	8.6
184	4	2	2.0	9.2
185	4	2	2.0	8.9
186	4	2	2.0	9.4
187	4	2	2.0	8.3
188	4	2	3.0	8.9
189	4	2	3.0	9.2
190	4	2	3.0	9.2
191	4	2	3.0	9.4
192	4	2	4.0	8.7
193	4	2	4.0	9.6
194	4	2	4.0	8.9
195	4	2	4.0	9.6
196	4	2	5.0	9.5
197	4	2	5.0	8.9
198	4	2	5.0	9.9
199	4	2	5.0	8.5
200	5	1	1.0	8.7
201	5	1	1.0	8.2
202	5	1	1.0	8.5
203	5	1	1.0	9.3
204	5	1	2.0	8.5
205	5	1	2.0	9.0
206	5	1	2.0	9.8

207	5	1	2.0	9.4
208	5	1	3.0	9.0
209	5	1	3.0	9.3
210	5	1	3.0	8.8
211	5	1	3.0	8.7
212	5	1	4.0	9.7
213	5	1	4.0	9.2
214	5	1	4.0	10.0
215	5	1	4.0	9.8
216	5	1	5.0	9.8
217	5	1	5.0	9.3
218	5	1	5.0	9.4
219	5	1	5.0	8.4
220	5	2	1.0	8.9
221	5	2	1.0	9.0
222	5	2	1.0	9.6
223	5	2	1.0	9.5
224	5	2	1.0	9.6
225	5	2	1.0	8.5
226	5	2	2.0	8.5
227	5	2	2.0	8.4
228	5	2	2.0	8.7
229	5	2	2.0	10.0
230	5	2	2.0	8.7
231	5	2	2.0	8.6
232	5	2	3.0	8.6
233	5	2	3.0	8.4
234	5	2	3.0	8.5
235	5	2	3.0	8.8
236	5	2	4.0	8.7
237	5	2	4.0	10.0
238	5	2	5.0	8.4
239	5	2	5.0	9.3
240	5	2	5.0	8.7
241	6	1	1.0	8.8
242	6	1	1.0	8.7
243	6	1	1.0	8.5
244	6	1	1.0	8.5
245	6	1	1.0	8.5
246	6	1	1.0	8.0
247	6	1	2.0	8.5
248	6	1	2.0	8.6
249	6	1	2.0	8.6
250	6	1	2.0	8.4
251	6	1	2.0	8.5
252	6	1	2.0	8.7
253	6	1	3.0	8.4
254	6	1	3.0	8.5
255	6	1	3.0	8.6
256	6	1	3.0	8.4
257	6	1	3.0	8.4
258	6	1	4.0	8.7
259	6	1	4.0	9.2
260	6	1	4.0	8.2
261	6	1	4.0	8.0
262	6	1	5.0	8.7
263	6	1	5.0	9.5
264	6	1	5.0	9.4
265	6	1	5.0	9.2
266	6	2	1.0	8.4
267	6	2	1.0	9.9
268	6	2	1.0	9.2
269	6	2	1.0	8.7
270	6	2	2.0	8.7
271	6	2	2.0	8.2
272	6	2	2.0	8.4
273	6	2	2.0	8.8
274	6	2	2.0	8.0
275	6	2	2.0	8.4

276	6	2	3.0	9.1
277	6	2	3.0	9.5
278	6	2	3.0	8.9
279	6	2	3.0	9.4
280	6	2	4.0	8.5
281	6	2	4.0	8.9
282	6	2	4.0	9.5
283	6	2	4.0	9.4
284	6	2	5.0	8.9
285	6	2	5.0	9.0
286	7	1	1.0	7.8
287	7	1	1.0	7.3
288	7	1	1.0	8.4
289	7	1	1.0	7.4
290	7	1	1.0	7.7
291	7	1	1.0	7.3
292	7	1	2.0	7.6
293	7	1	2.0	8.4
294	7	1	2.0	7.6
295	7	1	2.0	7.0
296	7	1	2.0	7.4
297	7	1	3.0	7.9
298	7	1	3.0	8.2
299	7	1	3.0	7.8
300	7	1	3.0	7.9
301	7	1	4.0	7.9
302	7	1	4.0	7.6
303	7	1	4.0	6.5
304	7	1	4.0	7.2
305	7	1	5.0	7.8
306	7	1	5.0	7.8
307	7	1	5.0	7.6
308	7	1	5.0	7.8
309	7	2	1.0	7.6
310	7	2	1.0	7.4
311	7	2	2.0	8.0
312	7	2	2.0	6.9
313	7	2	2.0	8.4
314	7	2	2.0	8.3
315	7	2	3.0	7.8
316	7	2	3.0	7.9
317	7	2	3.0	7.6
318	7	2	4.0	7.4
319	7	2	4.0	6.9
320	7	2	5.0	7.8
321	7	2	5.0	7.4
322	7	2	5.0	7.5

Obs.	TRT	REP	WETWEIGH	DRYWEIGH
1	1	1	5.1	0.90
2	1	1	5.3	0.90
3	1	1	5.0	0.90
4	1	1	5.0	0.70
5	1	1	5.1	0.90
6	1	1	4.4	0.90
7	1	2	4.8	0.80
8	1	2	4.7	0.90
9	1	2	4.7	0.80
10	1	2	4.3	0.60
11	1	2	5.5	0.90
12	1	2	3.3	0.70
13	2	1	5.6	1.00
14	2	1	5.4	1.10
15	2	1	5.3	1.00
16	2	1	5.7	1.10
17	2	1	5.4	0.90
18	2	1	6.4	1.20
19	2	2	5.7	1.05
20	2	2	4.7	1.00
21	2	2	5.2	1.00
22	2	2	6.5	1.10
23	2	2	6.2	1.00
24	2	2	5.2	0.90
25	3	1	6.6	1.00
26	3	1	5.2	0.90
27	3	1	5.2	0.90
28	3	1	4.9	1.00
29	3	1	5.1	0.80
30	3	1	5.4	1.00
31	3	2	4.7	0.90
32	3	2	5.2	0.90
33	3	2	5.7	1.00
34	3	2	5.1	1.00
35	3	2	4.4	0.90
36	3	2	4.6	0.90
37	4	1	5.0	0.90
38	4	1	5.2	0.90
39	4	1	5.2	0.80
40	4	1	5.0	0.70
41	4	1	6.7	1.30
42	4	1	4.9	0.90
43	4	2	5.6	1.00
44	4	2	4.6	0.80
45	4	2	6.0	0.90
46	4	2	5.2	0.80
47	4	2	5.7	0.80
48	4	2	5.6	1.00
49	5	1	4.8	0.80
50	5	1	5.8	1.00
51	5	1	5.1	0.80
52	5	1	5.6	1.00
53	5	1	5.6	0.90
54	5	1	5.0	0.80
55	5	2	5.0	0.70
56	5	2	4.8	0.80
57	5	2	4.9	0.80
58	5	2	5.6	1.00
59	5	2	4.9	0.70
60	6	1	4.4	0.70
61	6	1	4.1	0.70
62	6	1	4.2	0.50
63	6	1	4.3	0.60
64	6	1	4.7	0.80
65	6	1	5.0	0.70
66	6	2	5.0	0.90
67	6	2	4.5	0.70
68	6	2	4.6	0.80

crossed out values
were removed from data set
prior to analysis
= values for mysids not involved
in spawning

69	6	2	5.0	0.80
70	6	2	5.0	0.50
71	6	2	4.7	0.80
72	7	1	3.3	0.40
73	7	1	3.1	0.50
74	7	1	3.1	0.40
75	7	1	2.9	0.50
76	7	1	3.6	0.50
77	7	1	3.2	0.60
78	7	2	3.0	0.60
79	7	2	3.6	0.50
80	7	2	3.3	0.40
81	7	2	3.9	0.40
82	7	2	3.3	0.40

PRINTOUT # 16

TITLE: 425006-01, Diuron, mysid survival, day 28
FILE: a:42500601.dt1
TRANSFORM: ARC SINE(SQUARE ROOT(Y))   NUMBER OF GROUPS: 7

GRP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	solvent control	1	0.9390	1.3212
1	solvent control	2	0.9000	1.2490
2	dilution contrl	1	0.9000	1.2490
2	dilution contrl	2	0.9000	1.2490
3	0.27 mg/l	1	0.8670	1.1975
3	0.27 mg/l	2	0.8670	1.1975
4	0.56	1	0.9670	1.3881
4	0.56	2	0.8330	1.1498
5	0.96	1	0.8670	1.1975
5	0.96	2	0.7000	0.9912
6	1.9	1	0.8330	1.1498
6	1.9	2	0.7670	1.0671
7	3.9	1	0.8330	1.1498
7	3.9	2	0.4670	0.7524

TITLE: 425006-01, Diuron, total young/mean # surviving females
FILE: a:42500601.dt2
TRANSFORM: NO TRANSFORMATION   NUMBER OF GROUPS: 7

GRP	IDENTIFICATION	REP	VALUE	TRANS VALUE
1	solvent control	1	10.6000	10.6000
1	solvent control	2	7.4000	7.4000
2	dilution contrl	1	9.2000	9.2000
2	dilution contrl	2	9.9000	9.9000
3	0.27 mg/l	1	10.3000	10.3000
3	0.27 mg/l	2	8.1000	8.1000
4	0.56	1	6.8000	6.8000
4	0.56	2	8.1000	8.1000
5	0.96	1	9.2000	9.2000
5	0.96	2	2.8000	2.8000
6	1.9	1	4.9000	4.9000
6	1.9	2	3.2000	3.2000
7	3.9	1	0.0000	0.0000
7	3.9	2	0.0000	0.0000